1-1-1964

The Comparison Of The Secondary Education In India And In The United States Of America

Chandrika Bhagwandas Shah
Eastern Illinois University

THE COMPARISON OF THE SECONDARY EDUCATION IN INDIA AND IN THE UNITED STATES OF AMERICA

SHAH

THE COMPARISON OF THE SECONDARY EDUCATION IN INDIA AND IN THE UNITED STATES OF AMERICA

(TITLE)

BY

MRS. CHANDRIKA BHAGWANDAS SHAH

B.A., B.T., S.N.D.T. Women's University

Bombay, India, 1954

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

Master of Science in Education

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

1964
YEAR

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING
THIS PART OF THE GRADUATE DEGREE CITED ABOVE

7-31-64
DATE

D. Moler
ADVISER

7-31-64
DATE

D. Moler
DEPARTMENT HEAD

ACKNOWLEDGEMENTS

The author wishes to express her gratitude to her adviser, Dr. Donald L. Moler for his continued guidance and interest during all the steges of this study.

Her heartfelt thanks are due to Miss Marjorie Edman for editing the manuscript.

The author also wishes to express her deepest appreciation to her husband, Mr. Bhagwandas G. Shah, for his encouragement and his many valuable suggestions in the preparation of the manuscript.

CONTENTS

Chapter 1

Introduction

Education has become the symbol of hope and confidence in the future of mankind. Man faces problems of achieving world peace, human brotherhood, personal happiness, problems of political, social and economic significance. The majority of us are still trusting enough to believe that human beings can direct their destinies and that the process called education has a significant part to play in this phenomenon.

Although education occurs in all aspects of human living, most societies have established the institutions we call schools for its specific application. These institutions use a variety of means to promote what the society considers desirable achievements. The curriculum becomes the instrument by which the schools seek to transfer our concepts of education into concrete reality.

The curriculum is generally governed by the cultural demands, social, political and economic conditions of the society concerned. Those who institute the curriculum are under pressure from professional and community groups; some groups want more geography, others are in favor of citizenship education or teaching of trades; agriculturalists want more emphasis on agricultural education. Educational reforms force the claims of the newer scientific and technical knowledge, of modern foreign languages, and of commercial and economic studies. The structure

of the school system also has a profound effect on the organization of curriculum. For example, if the nine-year course of the traditional German gymnasium is compared with the four-year course of a Canadian high school, it is not difficult to see how this difference in structure influences the content or the subjects taken.

A factor that has always had great influence in determining the nature of specialization at the secondary level has been the relationship of schooling to vocation and the actual subjects taught to young people, as well as the age at which these students are taught. These factors have varied from culture to culture and from time to time in accordance with the economic, geographical, and political situation of the countries concerned. The length of training required to produce effective workers in the different sections of a country's economy has influenced not only the time at which specialized training is given but also the length of general education that has been provided for young people entering different occupations.

The British have demonstrated a great deal of adaptability in their history, changing to a heavily industrialized welfare state and shifting from the point of view of a colonial empire to that of a commonwealth of independent and cooperative nations, resulting in much change with consequent adaptation. They developed an excellent network of informal education ranging from instruction by way of the radio programs by the British Broadcasting Corporation to various types of adult education.

In the present century democracy and communism have emerged as two strong political systems. Both of them have changed the original "cultural" conception of secondary education by introducing the "vocational" concept of specific training to the already existing cultural studies. Among the democracies, it may be said that this type of change first came in the United States of America, while in the recent history of polytechnical education in the Soviet Union we can see an effort to link the school district with daily life.

In some countries there is dire need for the development of an international language such as English or French because the mother tongue of the individual pupil is not inclusive enough for the dissemination of knowledge in one phase of education--the modern sciences. In many parts of Asia and Africa, the problem is still more complicated because of the fact that the mother tongue is only a dialect used by a comparatively small number of people in the country. Under such circumstances a student is required to study the regional language and also an international language.

In view of the rapidly changing conditions in the world, the concept of general studies has become expanded to include physical and technical activities, art and other subjects which once would have been regarded as vocational skills suitable only for young people who were preparing to use them in their daily work. Another significant change has been the elimination of the distinction between primary and secondary education. The

process of education is now regarded as continuous, in which changes in curriculum and methods must occur gradually.

As a direct result of rapid advances in science and technology one of the most persistent problems that the secondary schools have faced in recent years is that of the overloading of courses of study and overburdening of the pupils.

From this discussion of factors affecting the curriculum it is apparent that different countries are bound to have differences in their school curricula. However, during the past two or three decades, the reconstruction of the secondary school curriculum has resulted generally in two cycles. The first cycle is one in which the curriculum consists mainly of the basic studies that all young people will be pursuing, while the second cycle is to provide for the final differentiation of studies required in preparation for entrance to a specific vocation or to higher professional training institution. In this regard the latest tendency is to blend the earlier distinction between the cycles.

The European and American systems have a basic difference in that in Europe courses are established by the educational authorities for different purposes while in the United States of America each school system is free to offer what it considers best. In the former system the choice made by the pupil is limited, while in the latter system a student can follow an individually designed course, comprised of the common elements together with elective subjects best suited to his needs.

Moreover, in European schools the status of newly introduced vocational subjects was initially much lower than that of the classical studies. As the business and industrial middle classes grew in number, many new types of schools were established to teach modern subjects. For example, in Germany some schools taught Greek and Latin, others Latin and modern languages, and still others, modern languages and science.

No other country has gone quite so far as the United States of America in developing a flexible curriculum adapted to the abilities and interests of its potential university students, yet all countries have been moving away from the rigid and undifferentiated curriculum which during a large part of the 19th century was considered to be necessary for the education of a nation's elite. In countries influenced by British educational practices, the earlier levels of the secondary school curriculum for children who are likely to enter a university are similar and a gradual differentiation takes place as certain subjects are dropped and the pupils concentrate upon a smaller number of subjects. This is a common pattern in countries as different as Australia, India, Ghana, New Zealand, Pakistan, and several other Asian and African territories.

In countries as different in conditions and background as Ethiopia, Ghana, India, Iran, and New Zealand, to take a few examples only, resistance has often been felt where attempts have been made to transfer pupils from the traditional academic courses into courses emphasizing agriculture, handicrafts,

industrial arts, and other fields regarded more useful to the pupils, in the light of their level of ability and to the needs of their community.[1] However, differentiated courses gradually became acceptable when the certificate awarded after the completion of the secondary curriculum met the requirements for entrance to an institution of higher learning.

The emphasis placed upon different subjects varies from country to country because of differences in commercial and industrial development and in the extent to which secondary education was being made available to the "lower" social stratum of society. The classical elements of the curriculum retained their strongest hold in less industrialized countries such as India and Pakistan, while in industrialized countries subjects of more immediate usefulness than classical languages were readily incorporated into the curriculum of the secondary schools to the benefit of children of the middle and working classes.

In the decade after the first world war, rapid growth of knowledge was reflected in an increase in the rise in the requirements for entry into the universities. To cope with this rise in standards attempts were made to prune the syllabuses to their essentials and adopt more "active" methods of learning, to reduce the amount of rote memory. During the second world war a great deal of experience was gained in the use of visual aids such as films and working models for explaining abstruse mathematical concepts. In the Soviet Union, the curriculum in mathematics and the sciences is constantly scrutinized to assure the

people that only the essentials are taught.

A broad survey of modern secondary curricula in different countries reveals some definite trends. There is a general realization in all countries that it is urgent to review the aims of education because of the scientific and technological revolution, especially the introduction of automation. The rise of democracy and of communism has eliminated different curricula for different social classes and the newer goals have been to provide an opportunity for either a general education or a specialized vocational training to all individuals according to their natural endowments and interests.

It is generally agreed that secondary education should focus on the development of the whole personality of the student and not his intellect alone. Naturally the modern tendency is to give proper emphasis to social, aesthetic, moral and ethical values.

As a consequence of the above common trends, the basic compulsory curriculum of secondary schools around the world has come to include: the mother tongue and its literature, mathematics, some of the natural and physical sciences, history and geography, music, art and physical education. In some countries a foreign language is included at the junior secondary level either because the mother tongue is inadequate for the needs of modern science and technology or because there is a need to supplement the mother tongue with a world language. In learning a language other than his own, a student also develops a

better understanding and appreciation of his own.

An outstanding feature of modern secondary education in the Soviet Union and other eastern European countries is the provision of polytechnical education at all levels and the initiation of all senior pupils into practical application of their education. Thus, the activities of the school are closely related with those of everyday life.

Although it is true that the process of incorporation of "elite and universal" systems is going on over all the world, it must be clear from the above that all countries have not yet reached the same level of achievement. Naturally, there are differences in the secondary curricula in different countries. A detailed comparison of the curriculum in a highly industrialized country like the United States of America with that in a predominantly agricultural country like India, would therefore, be very interesting. An attempt is made here to point out the salient features of the curricula in these two countries and to compare them.

Chapter 1

Footnotes

[1]UNESCO, World Survey of Education (New York, Paris: International Documents Service, A Division of Columbia University Press, 1961), III, 128-48.

Chapter 2

The History of Secondary Education in India and in the United States of America

India

Before the introduction of the western type of education in India by the East India Company in the early part of the nineteenth century, the indigenous educational institutions were (1) schools of learning--Pathshalas of the Hindus and Madrassahs of the Muslims (2) Elementary schools--Persian schools and schools teaching through the modern Indian languages. In the schools of learning, instruction was mostly given gratis and the medium of instruction was Sanskrit in one case and Arabic or Persian in the other. The students entered the schools at a fairly early age and studied as long as they desired and often for as long as twelve years or more. The major emphasis was on religious education and consequently they were conservative and exclusive.

The main agency for the spread of mass education was the elementary school. The instruction given in it was mostly limited to the three R's. A pupil joined the school at any time, followed his own pace of study and left the school when he had acquired all that he desired to know or the school had to teach. This was possible because the size of the school was generally small, 10-15 at the most. In bigger schools, there was in vogue a system under which the senior pupils were appointed to teach

the junior ones. There was no fee in the modern sense, but each parent who sent his child to the school generally made some payment to the teacher either in cash or in kind, at his convenience and according to his capacity.

However, by the end of the eighteenth century these indigenous institutions had suffered severe decay because of the inability of people to support them, which was the direct consequence of the general impoverishment of the country during the rule of the East India Company.

The history of Western education in India can be divided into seven parts. The first part covers the period from the beginning of the eighteenth century to 1813 when the Charter Act was passed. Although the East India Company was established as early as 1600, it undertook no educational activities in the nearly one hundred years of its existence. Attention was first drawn to this default in education by the Charter Act of 1698. According to this Act, priests and schools were maintained in the Company's garrisons by the Company for the purpose of educating the children of its (European) servants--servants of European extraction.

In 1705 the Company was made the ruling power in India and was called upon to foster or promote education among its subjects as the earlier Hindu and Muslim rulers had done. However, the Court of Directors of the Company was unwilling to assume this responsibility. After prolonged agitation the Company was compelled by the Charter Act of 1813, to find some source of funds for the fulfillment of this goal and to allow

missionaries to enter its dominions and spread Western "light and knowledge."

The second part of the history of Western education in India extends from 1813 to Wood's Education Dispatch of 1854. At the beginning of the period the Government of the day had surveys made of the then prevalent systems of education in an attempt to reorganize education to suit the needs of the times. Macaulay's Minute and Resolutions passed by the government in 1835, led to the establishment of schools teaching European literature and science. These schools became popular very rapidly because of the great interest shown in English education by some of the educated Indians and more particularly by leaders like Raja Ram Mohan Roy and others. In 1844 Lord Hardinge issued the proclamation that for service in public offices, preference was to be given to those who were educated in English schools. Consequently, education was assigned the limited function of preparing pupils for Government positions and not for living.

By 1853 a number of problems had arisen from the above mentioned objectives of schools. An enquiry was made. Wood's Despatch was issued in 1854, with which the third period began. The despatch expressed the willingness of the Government to sanction considerable increase of monetary appropriations to provide useful and practical knowledge for the masses. It also settled the controversy between those in favor of substituting Western culture for that of the Indian and those who believed in an incorporation of Eastern and Western cultures by declaring that

the chief aim of the educational system was to spread Western knowledge and science, although it was desirable to grant some encouragement to oriental learning at the collegiate level. Both English and the spoken languages of the people were to be used as media of instruction at the secondary level.

The establishment of universities in 1857 had far-reaching consequences on the content, range and scope of secondary education. Secondary education, instead of being a self-sufficient program preparing students to meet world problems after completing the course, became merely a step toward the universities; consequently schools were unable to function independently with a program of their own.

This type of secondary education gave rise to certain defects: the mother tongue was completely neglected as a medium of instruction; the courses of study became academic and unrelated to preparation for living, that is, there was no provision for vocational or technical courses for the middle classes. Moreover, the matriculation examination held by the universities not only dominated the secondary schools but also the instruction offered in primary schools.

During the period of 1854 to 1900 mission schools and colleges, educational institutions organized by the state education departments and private schools established by private enterprise for Indians were competing with one another in the dissemination of knowledge. The Indian Education Commission of 1882 (also known as the Hunter Commission) considered the

private schools built by the Indians to be the better teaching agency. This Commission recommended that "secondary education, as far as possible, be provided on the grant-in-aid basis and that the Government should withdraw as early as possible from the direct management of secondary schools."[2] The most significant contribution of the commission was that it anticipated what came to be recognized later as diversified courses of instruction in secondary schools. With respect to vocational and technical education, the commission recommended that in high schools there should be two avenues of instruction, one leading to the entrance examination of the universities and the other one of a more practical type intended to fit the youths for commercial, vocational or non-literary pursuits. However, the Government and the public ignored these specific recommendations and a most unwieldy development of secondary education resulted, leading to obvious and gross errors in structure and function of the school system.

The fourth part covers the period from 1901 to 1921, when the control of education was transferred to the Indian ministers. The University Commission was appointed in 1902. As a result of the recommendations of this commission, secondary education was placed under even stronger domination of the universities. Under the Indian Universities Act of 1904, schools had to be approved by the universities. Consequently, a rising need for making the secondary schools independent of universities was felt and in some provinces Boards of Secondary

Education were created by the Provinces. The Boards were responsible for writing the syllabuses and for conducting the final examinations. The Secondary School Leaving Certificate issued by these boards prepared the student either for admission to a college or for a job.

An important event of this period was the appointment of the Calcutta University Commission in 1917, under the Chairmanship of the late Sir Michael Sadler. This Commission made a careful study of the secondary education and recommended that "the dividing line between the university and secondary courses is more properly to be drawn at the intermediate examination than at the matriculation."[2]

During these years there was great expansion in secondary education, the number of schools increasing both in rural and urban areas, largely due to the interest shown by the public and the generous donations of individuals and institutions. Due to this unprecedented expansion of the academic type of secondary schools, it became necessary to select a group of experts in the field of education in each province whose sole purpose was to advise the provincial government in educational matters in each province. This group was organized as the advisor of the Central Advisory Board of Education.

The fifth part of the history of secondary education in India extended from 1921 to the introduction of provincial autonomy in 1937, in eleven provinces of British India only. In spite of the establishment of the Boards of Secondary Education in some

provinces, matriculation at the university still dominated the whole of the secondary course. The Hartog Committee was therefore appointed to review the position.[2] The Committee recommended that more pupils should be diverted to industrial and commercial careers at the end of the middle level, preparatory to special instruction in technical and industrial schools. It also suggested that in order to attract the best men to the teaching profession, the pay of the teacher should be raised sufficiently in order to give him the status which the work demands. A similar recommendation to provide diversified courses and to make the secondary level more practical and complete in itself was also made by the Sapru Committee,[3] which had been appointed in 1934 by the U. P. Government to enquire into the causes of unemployment in the province. As a result of these recommendations and also those of Messrs. Abbott and Wood (1936-37) made to the Central Government,[2] a new type of institution called the Polytechnique came into existence which was equivalent to the liberal arts and science colleges. At the secondary level the provincial governments started technical, commercial and agricultural high schools, conducting non-literary courses.

The decade between 1937 and 1947 was a period of great expansion in the field of education. The popular ministries first introduced schemes for liquidation of illiteracy and compulsory primary education. The need for a national system of education was felt by the Central Advisory Board of Education, which in 1938-1939 appointed two committees to study "Basic

Education" as propounded by Mahatma Gandhi. He had tried the system on Tolstoy Farm in South Africa and also in India, whenever he had to deal with his colony of workers and children. Basic education envisaged instruction based on a craft, which was related to village economic life. Besides training of the hands, Gandhi also insisted on the development of the child's intellect and heart in his own mother-tongue. He wanted the content of education to be centered around the child's social and cultural environment. From these principles Gandhi drafted the Wardha Scheme of Education. The above two committees examined the scheme and recommended that:[4]

(1) Basic education consist of a course of eight years from the age of six to fourteen years. The Junior level should cover the first five years and the senior level the last three years.

(2) The age range of compulsion should be six to fourteen years, though some children can be admitted to the "Basic" school at the age of five.

(3) Diversion of students from the "Basic" school to other kinds of schools should be allowed after the 5th class.

(4) No external examination need be held. At the end of the "Basic" school course, a leaving certificate based on an internal examination should be given.

(5) The various types of post-primary school (other than "Senior Basic" school) to which suitable children may be transferred at the end of the "Junior Basic" level should provide a

variety of courses designed to prepare the pupils for entry to industrial and commercial occupations as well as to universities. In these schools arrangements should also be made for the assimilation of pupils, who have completed eight years of the "Basic" school.

While the recommendations of these committees were being implemented, the second world war was declared. Consequently the pace of educational development slackened. However, the Central Advisory Board of Education submitted a report in 1944 to the Government of India on Post-war Educational Development. The report, popularly known as the Sargent Report,[6] visualized a system of universal compulsory and free education for boys and girls between 6 and 14 years. It was also recommended that the high school course should cover six years from 11 to 17. The high schools should be of two main types (1) academic and (2) technical.

After gaining her independence in 1947, India adopted a democratic type of government and a new era (the seventh part) began in education as in many other fields. The main object of education, then, was a general and intensive development of each individual's personality. About the field of secondary education, the University Education Commission, under the chairmanship of Dr. S. Radhakrishnan and the Inter-University Board proclaimed in 1948 that "our secondary education remains the weakest link in our educational machinery and needs urgent reform."[6] Consequently the Central Advisory Board appointed the Secondary

Education Commission in 1952 to review the position of Secondary Education in all of India and to recommend ways of solving the problems involved.

The salient features of the commission's report are as follows:[4]

(1) After four or five years of primary or junior basic education, should begin the middle level of three years and then the higher secondary level of four years.

(2) There should be diversification of courses through multi-purpose schools.

(3) The mother-tongue or the regional language should be the medium of instruction throughout the secondary level.

In 1947 the first group of students completed the work in the "Basic" schools. Many of them entered the conventional type of secondary high schools, and special post-basic schools were also established in Sevagram (the school established by Mahatma Gandhi) and Bihar. These post-basic schools carried the principles of centering education around some selected craft one stage further. Initially Basic Schools had restricted their activity to spinning and weaving of cotton and agriculture, but with growth of experience newer crafts such as embroidery, woodwork, spinning and weaving of silk, machine tools, carpentry, leatherwork, book-craft, gardening and domestic crafts including sewing, cooking, house management, etc., have been added, depending on local conditions and needs. In recent years the program for the conversion of the existing elementary schools

into basic ones, the opening of new basic schools, the introduction of crafts in non-basic schools, the production of literature on basic education and the training of basic school teachers have gained momentum. The number of students in Junior Basic Schools went up from 2.8 million in 1950 to 4.8 million in 1957. The corresponding figures for students in senior basic schools were 66,000 and 2 million. During the same period the total number of secondary schools (including junior and senior basic schools) increased from 21,000 to 39,000 and the enrollment from 5.2 to 10.2 million. The third five year plan has been in progress since 1961 and still is.[7]

The Government of India has formed an All-India Council of Secondary Education, an autonomous body to advise the Central Government on matters of secondary education. The council relies upon the teachers of training colleges to undertake the task of improving secondary education by the introduction of departments of extension services with the intent of opening professional contacts with the secondary schools in their respective areas. Educational conferences, seminars and workshops for teachers are now conducted; and teachers have opportunities to meet and discuss their problems so that they might arrive at solutions to their problems by exchange of thoughts and sharing of experiences.

United States of America

The history of American Secondary Education presents three well-defined stages of development. There was, first, the colonial period, with its Latin Grammar Schools. Secondly, the period extending from the Revolutionary War to the middle of the 19th century, during which the attempt was made to solve the problem of American Secondary Education by means of the so-called Academy; and thirdly, the succeeding period, chiefly characterized by the growth of public high schools.[10]

The Latin Grammar Schools in the United States of America were transferred from Europe and England. The first such school was started in Boston in 1635. These were college preparatory schools to train young men "for the service of God, in Church and commonwealth." By 1700, the Latin Grammar School had reached its peak.

The academy arose from the need for a school for the middle-class settlers, a school with a curriculum designed to help them cope with their everyday problems. The first academy was chartered by Benjamin Franklin in 1751 at Philadelphia. By 1850, there were 6,000 academies with over a quarter of a million students. By the end of the eighteenth century, however, the academy had drifted away from its original concern with practical studies and had taken on the character of a college preparatory school.

Early in the 19th century there was a popular demand

for a free institution available alike to the rich and the poor, and people were in favor of keeping young people at home rather than sending them away to boarding school. In response to these pressures, the high school emerged. In 1821, the first high school was opened in Boston and in 1827 James Carter passed the first statewide law providing for common secondary schools. After the decision in the Kalamazoo case in Michigan in 1874, the growth of the public high school was greatly promoted. The Committee of Ten on secondary school studies was appointed in 1891 and reported in 1893. The committee gave attention chiefly to the teaching of subject matter in the secondary schools and to the need for uniformity in content. It set up a clear, definite, quantitative measure of secondary education based on the equivalence of studies.

By the close of the 19th century, the high school was firmly established as a typical American institution. It admitted girls on an equal footing with boys. The growth of the secondary school was very rapid during the first half of the 20th century. In 1900, the number of pupils in the secondary schools was 500 thousand, while in 1950 it rose to 6 million. During this period the high school was reorganized and the secondary program was extended downward to include junior high school and upward to embrace junior college. In 1911, the Committee on Economy of Time was appointed by the National Education Association and in 1918, the Commission on the Reorganization of Secondary Education. These Committees recommended a

change in the philosophy of American education and the commission issued the following seven cardinal principles of secondary education:

(1) Health
(2) Command of fundamental processes
(3) Worthy home membership
(4) Vocation
(5) Civic education
(6) Worthy use of leisure
(7) Ethical character

These principles were formulated in an effort to show that whatever secondary education undertook to do should be determined by the needs of the society it was to serve. Another important study was undertaken in the 1930's by the Progressive Education Association Commission on the relation of school and college. It was published in 1941 as the Aikin Study. It was an attempt to ascertain if the secondary school was to adapt the curriculum to the student's present and future life and his personal requirements without handicapping those who continue their study in college.

Public vocational education at the high school level was introduced in Wisconsin in 1907. The Federal Government also recognized the need for this type of education and passed the Smith-Hughes Act in 1917. This act provided Federal support for high schools offering courses in vocational agriculture and home economics. The Commission on the Reorganization of

Secondary Education labeled those high schools which would provide vocational education in separate school units as "comprehensive" high schools. The Commission felt that the efforts of vocational education would be frustrated if it were mixed with general education.[11]

Comparison

A comparison of the history of secondary education in India and in the United States of America reveals that during the colonial period, education in both of the countries was directed toward the classes and not the masses. In India education was expected to be adapted to the masses but it never was. As a result, a large majority of the people of India was deprived of secondary education. The medium of instruction being a foreign tongue created an attitude of indifference among the people. Moreover, the content of education was good only to train administrative personnel and had no bearing on the practical needs of the people. Similarly during the colonial period Latin Grammar Schools prevailed in the United States of America. In these schools there was a great emphasis on classical studies of Latin and Greek. The common people could hardly take advantage of the Grammar Schools.

After the subject of education was transferred to the Indian Ministers in 1921, we can see the beginnings of changes in secondary education which were aimed at increasing its usefulness to the rural people of India. It was only after India

became independent in 1947, that vigorous attempts were made to expand facilities for secondary education and to modify the curriculum in such a way that it would meet the requirements of individual students. Similar changes took place in the United States of America when the Latin Grammar schools were replaced by academies in the middle of the eighteenth century. The academies offered subjects of practical usefulness in the beginning. However, by the end of the eighteenth century they drifted from this basic idea and so the high schools emerged at the beginning of the nineteenth century. Since 1900 American secondary schools have developed according to the changing needs of the people. Consequently, the aim of "Secondary Education for All American Youth" is about to be accomplished. From these facts, it can be seen that there is a difference of fifty years in the development of the proper kind of secondary education in the two countries.

Chapter 2

Footnotes

[2]Syed Nurullah and J. P. Naik, A History of Education in India (Bombay: Calcutta: Madras: London: The Macmillan Co., Ltd., 1951), pp. xiii-xiiii.

[3]Bureau of Education, India, Education in India 1938-39 (Delhi: The Manager of Publications, 1939), p. 40.

[4]Ministry of Education, Government of India, Progress of Education in India 1947-52 (Delhi: The Manager of Publications, 1953), pp. 26-44, 61-88.

[5]M. K. Gandhi, Basic Education (Ahmedabad: Navjivan Publishing House, 1956), pp. iii-vi.

[6]Government of India, The Secondary Education Commission Report 1952-53 (Government of India: Ministry of Education, 1954), pp. 9-19, 230.

[7]Ministry of Information and Broadcasting, Government of India, India 1960 (New Delhi: The Publications Division, Ministry of Information and Broadcasting, Government of India, 1960), pp. 115-16.

[8]Bureau of Education, India, Report on Post-War Educational Development in India (Delhi: The Manager of Publications, 1944), pp. 12-14.

[9]Humayun Kabir, Education in India (New York: Harper and Brothers, 1957), pp. 22-74.

[10]Nicholas Murray Butler, Monograph of Education in the U.S.A. Albany: J. B. Lyon and Co., 1900), p. 3.

[11]Emma Reinhardt, American Education--An Introduction (Rev. Edition. New York: Harper Brothers Publishers, 1960), pp. 302-17.

Chapter 3

The Aims of Secondary Education in India and in the United States of America

India

During the early colonial period the missionaries, who believed in substituting Western culture for the oriental culture, were responsible for the major portion of the secondary education. In the first half of the 19th century, the objects of British educational policy in India were (a) to spread Western knowledge (b) to secure properly trained employees for public office and (c) to represent the Indian people in Parliament.

Private Indian enterprise made the major contribution to secondary education in the second half of the 19th century. The motives that led to the expansion of private enterprise were mainly of patriotic interests. By about 1880, there was a wave of social, religious and political reforms in India--a sure beginning of a renaissance in Indian national life. The leaders of this movement were inspired by a faith in the ideal of building a great nation in India and their ultimate objects were social and political.

In the first two decades of the 20th century, Lord Curzon enunciated a policy for secondary education aimed at a stricter control and improvement of schools rather than an increase in their number. However, greater expansion of secondary

education took place in this period through private Indian enterprise because of a great social and political awakening. Attempts were also made to introduce vocational courses at the upper secondary level, although the success obtained was hardly encouraging.

During the period of 1921-37, secondary schools were opened in rural areas through local patriotism and also a strong desire on the part of the people not to send their children to distant towns. Efforts were also made by the Government to spread secondary education among less advanced classes of the population by providing scholarships and free studentships.

In the next decade Basic Education was introduced in rural areas. It was based on the principle of learning by doing. The scheme aimed at training the youth in one basic craft which would be useful to him in daily life.

The aims of secondary education after India gained her independence in 1947 have been (1) the training of character to prepare the students to function creatively as citizens in the emerging democratic social order; (2) the improvement of their practical and vocational efficiency; (3) the development of literary, artistic and cultural interests, and (4) the development of leadership in the social, political, industrial or cultural fields so that the student may assume an effective role in the local communities.

United States of America

In the United States of America the function of the Latin Grammar School was to prepare students for college and to train young men for the service of God in the church and of the community. However, the sturdy pioneers preferred to abandon the classics and substitute studies that would prepare youth for practical living. Therefore, the academy focused its curriculum to help the students cope with their everyday problems in commercial and business activities. Moreover, it also encouraged the education of women. When the academy strayed away from this objective and became a college preparatory school it was replaced by the secondary high school, whose aims were training in specific skills and preparing for college. Its purpose was to educate the student for everyday living and for careers other than the traditional professions.

The commission on the Reorganization of Secondary Education (1918) recommended the following seven objectives of the secondary curriculum. (1) Health (2) Command of fundamental processes (3) Worthy home membership (4) Vocations (5) Civic education (6) Worthy use of leisure (7) Ethical character.

The commission stated that two important goals of secondary schools are:

(1) The maximum development of all the mental, moral, emotional and physical powers of the individual, to the end that he might enjoy a rich life through the realization of worthy desirable personal goals.

(2) The maximum development of the ability and desire in each individual to make the greatest possible contribution to all humanity through responsible participation in and benefit from the great privileges of American citizenship.

The present target of the educational authorities is "Education for All American Youth." The secondary school is trying to adapt its services to the growing and changing needs of the people. It stands ready to advise young people both in and out of school about personal and social, as well as, academic and occupational problems.

Comparison

From the above discussion of the aims of secondary education in India and in the United States of America it is clear that during the early colonial period the aim of the missionaries in India was to spread Christianity. Later, training for administrative jobs became the objective of secondary education. However, in the United States of America, during the colonial period, secondary education was directed toward the spread of European culture. The study of Greek and Latin classics was of prime importance.

In that the colonial period of India was of longer duration, the growth of secondary education due to the efforts of private Indian enterprise, was directed mainly toward the awakening and motivation of political and social interests among the people. Since the revolution, the objective of secondary education in the United States of America has been to enable the youth

to achieve full personal and economic development.

The present aims in independent and democratic India are similar to those in the United States of America. Secondary education in both of the countries is directed to meet the social, political and economic demands of the people.

Chapter 4

Medium of Instruction in the Secondary Schools of India and of the United States of America

India

The media of instruction in indigenous schools of India were regional languages, Sanskrit, Arabic and Persian. In the beginning of British rule when secondary education was introduced there were controversies regarding the medium of instruction between supporters of English on the one hand and the regional and classical languages on the other. The Government naturally decided in favor of the English language.

In the latter half of the 19th century, the indigenous schools were totally neglected by the Government so that they completely disappeared by 1902. Westernization of the content of education was continued through the medium of English.

The exaggerated importance of English considerably hindered the growth of the Indian languages as media of instruction at the secondary level. However, in the early years of the present century Lord Curzon demanded that the Indian languages be used in lower secondary standards. By 1920, the Indian languages came to be used generally as the media of instruction at the middle school level. However, English continued to be the medium at the high school level.

From 1921 to 1936, the most important achievement in secondary education was the large scale adoption of modern Indian

languages as the media of instruction at the secondary level.

During the following ten years, the difficulties which had beset the adoption of modern Indian languages as media of instruction at the secondary level in the earlier period disappeared almost completely. Text books of good quality were published in sufficient numbers; scientific terminology emerged and was made current, and, although lacking in uniformity and universal acceptance in all parts of India, it paved the way for the preparation of common scientific terminology for use in Indian languages. By 1947, therefore, the mother-tongue became the medium of instruction at the secondary stage.

The Secondary Education Commission (1952) recommended that at the middle school level every child should be taught at least two languages. Hindi (national language), and English should be introduced at the middle school level, subject to the principle that no two languages should be introduced in the same year. At the high and higher secondary level at least two languages should be studied, one of them being the mother-tongue or the regional language. Recently the study of Hindi has been introduced even in the primary school.[12]

It should be mentioned here that although Hindi was adopted as the national language of free India, it was not possible to make it the medium of instruction throughout the country because (1) Hindi is not a fully modern language and must be supplemented in certain areas, such as science and industry; (2) it is not rich in literature; (3) it has had practically no

improvement since the advent of the British in India; (4) although it is the most widely used of the sixteen languages, it is still the mother-tongue of less than 30 per cent of the people.

United States of America

In respect to the medium of instruction, there was no problem at all in the United States of America because all are English speaking people, although it is also a multi-state country like India.

Chapter 4

Footnotes

[12]Government of India, The Secondary Education Commission Report 1952-53 (Government of India: Ministry of Education, 1954), p. 73.

Chapter 5

The Curriculum in the Secondary Schools of India and of the United States of America

India

In the early period of colonialism in India, as the secondary education was imparted mainly by missionaries, the emphasis was on the teaching of classical English and religion--Christianity. The indigenous system emphasized the learning of the three R's. In this period most of the time was consumed by controversies regarding the aim of education, the medium of instruction and consequently the content of secondary education. Some efforts were made to introduce vocational education in order to provide personnel for the subordinate ranks of Government Service. This was radically different from liberal education which aimed at the spread of Western knowledge.

During the second half of the 19th century, universities were established (1857). They dominated secondary schools in every respect, and secondary education became merely a step toward the universities. As a result the mother-tongue was completely neglected, the courses of study became too academic and unrelated to daily living because of lack of vocational or technical courses. In 1882 the Hunter Commission recommended that in high schools there should be two avenues, one leading to the entrance examination of the university and the other of a more practical character intended to prepare the youths for commercial

and vocational pursuits. Unfortunately this recommendation was neglected and the classical approach continued to dominate secondary education till the end of the century.

The Indian University Act of 1904 increased the domination of universities over high schools and resulted in the creation of Boards of Secondary Education in some states which were responsible for laying down syllabuses and for conducting examinations at the school's final level. In 1917, the Calcutta University Commission recommended that the dividing line between the university and secondary courses be drawn at the intermediate examination rather than at the Matriculation. However, it was not until 1929, when the Hartog Committee recommended that diversified industrial and commercial courses be offered in the high school, that a real effort was made to separate secondary education from the universities.

The Sapru Committee (1934), further emphasized the need to provide vocational subjects to meet the requirements of different types of students. The committee thought that vocational training should begin after the lower secondary level. As a result of the Abbot-Wood report (1936-37), a new type of technical institution called the Polytechnic came into existence. The provinces also started technical, commercial, and agricultural high schools conducting non-literary courses. The main objective of this development was to relieve unemployment among high school and college graduates.

In 1944, the Central Advisory Board of Education reported in what came to be known as the Sargent Report that high schools

should be of two main types. (1) The academic high schools should be designed for instruction in the arts and pure sciences. (2) Technical high schools should provide training in the applied sciences and in industrial and commercial subjects. In both types the course in the junior departments should consist of the common core of humanities. Art and music should form an integral part of the curriculum in both, and all girls should take a course in domestic science.

English should be a compulsory second language. All pupils should also acquire some knowledge of mathematics and elementary science. Physical education should be obligatory. The following list of subjects was suggested for academic and technical high schools.

Academic High Schools

1. The mother-tongue
2. English
3. Classical language
4. Modern languages
5. History (Indian and World)
6. Geography (Indian and World)
7. Mathematics
8. Science (physics, chemistry, biology, physiology, hygiene)
9. Economics
10. Agriculture
11. Civics
12. Art.

13. Music
14. Physical training

Technical High Schools

1. The mother-tongue
2. English
3. Modern language
4. History (Indian and World)
5. Geography (Indian and World)
6. Mathematics
7. Physics
8. Chemistry
9. Biology
10. Economics
11. Technical subjects (wood and metal work, elementary engineering, measured drawing)
12. Commerce (bookkeeping, shorthand, typing, accountancy, commercial practice, etc.)
13. Agriculture
14. Art (including designing for industrial and commercial purpose)
15. Music
16. Physical education

The high school should cover six years and the normal age of admission should be about eleven.[13]

Basic Education

Simultaneously with the development of diversification of courses in secondary education, attempts were made to

establish a national system of Basic (primary and middle) Schools which were based on the principle of "learning by doing." This type of school was first introduced in rural areas. The age range for compulsion was 6 to 14 years. The study of the National Language (Hindustani) was compulsory. The activity in the lower classes was of many kinds and later it led to a basic craft, such as spinning, weaving, and agriculture, etc., the produce from which was sold and the proceeds applied to the upkeep of the school. Cultural subjects which could not be correlated with the basic craft were taught independently. There was no place for teaching of English in this scheme. However, the decision to teach or not to teach this subject was left to the discretion of each province and depended on the local demand for English. A special feature of this scheme (known as Wardha Scheme or Basic Education 1938-39) was the introduction of the internal examination at the end of the course.

The second Wardha Committee appointed by the Central Advisory Board of Education also in 1938-39 defined two levels of Basic Education, "Junior" level covering a period of five years and the "senior" level three years. It also recommended that the courses should be designed to prepare pupils for entry into industrial and commercial occupations as well as universities. It also recommended that courses for girls attending senior basic schools should include such subjects as Cookery, Laundry, Needlework, the Care of Children and First Aid. Thus, it can be seen that basic education is based on sound principles

of psychology and sociology. In it there is a judicious and harmonious mixture of idealism, naturalism and pragmatism. It is child-centered, craft-centered and community-centered. Both the Union Government and the State Governments are trying to make the scheme a success.

In 1948-49 and 1951, the Central Advisory Board of Education adopted resolutions emphasizing the need for the appointment of a commission by the Government of India to study further the question of the true purpose of secondary education and its relation to Basic and university education. Such a commission was therefore appointed in 1952, and its report was known as the "Secondary Education Commission Report."

The commission recognized the following basic principles of curriculum construction.[14]

(1) It must be clearly understood that according to modern ideas about education, curriculum does not mean only the academic subjects traditionally taught in the school, but it includes the totality of experiences that a pupil has through the manifold activities that go on in the school, i.e., in classroom, library, laboratory, and play-grounds, and in the numerous informal contacts between teachers and pupils.

(2) There should be enough variety and elasticity in the curriculum to allow for individual differences and adaptation to individual needs and interests.

(3) The curriculum must be vitally and organically related to community life, interpreting for the child its

salient and significant features and allowing him to come into contact with some of its important activities.

(4) The curriculum should be designed to train the students not only for work but also for leisure.

Structure of Schools:

Secondary schools fall into two main categories.

(1) Middle schools and senior basic schools which cater generally to the pupils of the age group 11 to 13.

(2) High schools and higher secondary schools, the high school providing a three year course and the higher secondary, a four year course. The age range of pupils in high schools would approximately be 14 to 16 and in higher secondary schools 14 to 17. The last year of the higher secondary level represents the first year of the Intermediate college but is transferred to the secondary school. As a result of this change the degree course at the university would be of three years' duration.

(3) Multi-purpose schools should be established wherever possible to provide varied courses of interest to students with diverse aims, aptitudes and abilities.

(4) Those who have successfully completed such courses should be given opportunities to pursue higher specialized courses in polytechnics or technological institutions.

(5) All levels should provide special facilities for agricultural education in rural schools and such courses should include Horticulture, Animal Husbandry and Cottage Industry.

Technical Education

(1) Technical schools should be started in large numbers either separately or as part of multi-purpose schools.

(2) Apprenticeship training being an important part of the training needed, suitable legislation should be passed making it obligatory for industry to afford facilities to students for practical training.

Other Types of Schools

(1) Public schools should continue to exist for the present and the pattern of education given in them should be brought into reasonable conformity to the general pattern of national education.

Study of Languages

(1) The mother-tongue or the regional language is the medium of instruction in each of the sixteen states of India.

(2) Moreover, English and Hindi are introduced at the end of the Junior Basic level.

(3) At the high and higher secondary level the mother-tongue or regional language and, at least, one other language are taught.

Curriculum at the Middle School Level

The special function of the curriculum at the middle school level was to introduce the pupil in a general way to the important departments of human knowledge and activity.

The aim should be to give the child an appreciation of human achievement in different fields, to widen his outlook and broaden his sympathies. In view of this goal the commission suggested the following broad outline for the middle school curriculum:

1. Languages
2. Social Studies
3. General Science
4. Mathematics
5. Art and Music
6. Craft
7. Physical Education

The Curriculum in the High Secondary School Level

The special abilities and interests of the pupils would generally be taking definite form by the end of the middle school. So, the curriculum at this level should, as far as possible, be developed on the basis of these abilities and interests. We have to provide courses in high schools and higher secondary schools with a fairly wide latitude of choice. The primary object of doing so is to provide suitable scope for the development of the special interest of the pupils.

The broad outline of high school curriculum is as follows:

A

(i) Mother-tongue or regional language, or a composite course of the mother-tongue and a classical language.

(ii) One other language to be chosen from among the following:

(a) Hindi (whose mother-tongue is not Hindi)

(b) Elementary English

(c) Advanced English

(d) A modern Indian language

B

(i) Social Studies

(ii) General Science including Mathematics.

C

One craft to be chosen from the following list:

(a) Spinning and weaving

(b) Woodwork

(c) Metal work

(d) Gardening

(e) Tailoring

(f) Typography

(g) Workshop practice

(h) Sewing, needlework and embroidery (for girls)

(i) Modeling

D

Three subjects from one of the following groups.

Group 1. (Humanities)

(a) Classical language or a third language from A(ii) not already taken.

(b) History

(c) Geography

(d) Elements of Economics and Civics

(e) Elements of Psychology and Logic

(f) Mathematics

(g) Music

(h) Domestic Science

Group 2. (Science)

(a) Physics

(b) Chemistry

(c) Biology

(d) Geography

(e) Mathematics

(f) Elements of Physiology and Hygiene

Group 3. (Technical)

(a) Applied Mathematics

(b) Applied Science

(c) Elements of Mechanical Engineering

(d) Elements of Electrical Engineering

Group 4. (Commercial)

(a) Commercial Practice

(b) Bookkeeping

(c) Commercial Geography or Elements of Economics

(d) Shorthand and Typewriting

Group 5. (Agriculture)

(a) General Agriculture

(b) Animal Husbandry

(c) Horticulture and Gardening

(d) Agricultural Chemistry and Botany

Group 6. (Fine Arts)

(a) History of Art

(b) Drawing and Designing

(c) Painting

(d) Modeling

(e) Music

(f) Dancing

Group 7. (Home-science)

(a) Home Economics

(b) Nutrition and Cookery

(c) Mother Craft and Child Care

(d) Household Management and Nursing.

They recommended a general course in social studies and general science should be provided at the high school level for those who do not select these among their options.

They also recommended that every high school student should take one craft. It is necessary that the student attain a reasonably high standard of proficiency in one particular craft, so that, if necessary, he may support himself by pursuing it. By working with his hands the adolescent learns the dignity of labor and experiences the joy of doing creative work, It reveals and strengthens practical aptitudes, facilitates clarity of thinking, gives chances for co-operative work and thus

enriches the entire life of the individual.

They recommended seven groups of optional courses. These seven groups would provide enough scope for full freedom of choice to pupils with different interests and aptitudes.[15]

The new curriculum was well and carefully planned. What was really needed was a new orientation and a new approach. A curriculum could not be regarded as fixed for all times: it should be a matter of constant experimentation. It is essential to go on examining and evaluating the contents of the curriculum, adding to it significant new items and weeding out whatever has ceased to be of definite value to the pupil and his immediate and future life.

The United States of America

The Latin Grammar School restricted its curriculum to the classics. The study of Greek and Latin extended through four years.

The academy had three schools, Latin, English and mathematical, each with a separate master. Gradually, courses useful for commercial and business activities were also included. The subjects taught in the academy included English Grammar, Composition and Rhetoric, the Modern Languages, the Sciences, the Social Studies, Mathematics and Arts, Music, Bookkeeping, etc.

Early in the 19th century the curriculum of the high schools provided for all the above subjects and in the last quarter of the century it expanded its curriculum to embrace

Etymology, Elocution and Reading, Higher Grammar and Rhetoric, with Composition and Declamation, Bookkeeping, Algebra, Geometry, Natural Philosophy, Zoology, History, Chemistry, Physiology, Botany, Latin, Greek, French, German, Physical Geography, Political Economy, Drawing, Painting and Vocal Music. The Committee of Ten (1893) had also recommended that Astronomy, Meteorology, and Geology be included. In the secondary schools the committee gave attention especially to the teaching of subject matter, to the need for uniformity in content, to the standardization of requirements and to the allotment of time.

In 1918, the Commission on the Reorganization of Secondary Education was appointed. Fourteen committees within the commission worked on different subjects, ultimately recommending seven Cardinal Principles for Secondary Education which were widely publicized.

Structure

The downward extension of secondary education began with the appearance of the Junior high school about 1910. The 6-3 plan or some other combination such as 6-6, 7-5, or 6-2-4 was substituted for the traditional 8-4 plan. A few schools included the sixth grade in the junior high school and the ninth grade in the senior high school, thus creating a 5-3-4 pattern.[16]

Subjects Taught in Secondary School

English

Training in the vernacular was consistently offered in American secondary schools from the beginning of the Latin

Grammar School up to 1925. English was divided into two major categories: (1) Grammar and (2) Literature.

Social Studies

Social studies had a place in the high school. They included History, Political Economy, Constitution of the U.S.A., Sociology, Civics, Vocational Civics, Geography, Industrial and Economic History.

Science

Because of the rapid increase in scientific knowledge science was introduced into the curriculum under the name of "natural philosophy" which was later substituted by physics in the high school. The aims of teaching of science were:

(1) Understanding, ability to analyze, appreciation and control of the everyday environment.

(2) Appreciation of the applications of science in Industrial and social life.

(3) Transmitting a fund of information about nature.

Mathematics

General, unified and composite mathematics was offered in the first and second year of high school.

Foreign Languages

In the foreign languages, French, German and Spanish were offered.

The Special Subjects

Manual Arts, Home Economics, Agriculture, Commercial Subjects, Music, Art, and Physical Education were among the special subjects offered in the high school. They aimed at developing skill in performing household activities, teaching principles of economy, creation of interest in home-making, developing a scientific attitude toward household activities and showing a relationship of civic and economic problems to the home.

Agricultural

The courses in agriculture at the high school level included Farm Crops, Horticulture, Animal Husbandry, Poultry, Soils, Agricultural Engineering, and Farm Management for the junior high school.[17]

Curriculum in Secondary Schools in the U.S.A.

Grammar School

The purpose of the Grammar School of the seventeenth century was to prepare students for college and to develop a leadership group educated in classics and in religion. The curriculum therefore, consisted of the Scriptures, Greek and Latin. However, as the practical need for Latin began to diminish, instruction centered more on mechanics and agriculture rather than classics. Due to the changing needs of people, the Grammar School declined in the eighteenth century, giving way to the academy.

Academy

Benjamin Franklin, the founder of the academy in Philadelphia, had little enthusiasm for the humanistic approach. He was preoccupied by the idea of content useful for the civic and occupational careers of the rising middle classes of the colonies. He proposed Science, Mathematics, Agriculture, Commerce, Industry and mechanics for the curriculum. Due to the pressure from men of wealth and learning he was forced later to include the ancient and modern languages, i.e., English, Greek and Latin. As academies grew in other parts of the country, Music, Elocution, Analytical Geometry, Logic and Geography were added to the curriculum. The colleges also responded to these changes by adding a number of the new subjects to the usual subjects acceptable for entrance. By the middle of the eighteenth century the academy had drifted away from its original concern with practical studies and became merely a college preparatory school. As a result, early in the nineteenth century, the high school emerged.[18]

The High School

The high school was a three year school and its purpose was to educate pupils for life outside of the traditional professions. The course of study embraced Etymology, Elocution and Reading, Higher Grammar and Rhetoric with Composition and Declamation, Bookkeeping, Physical Geography, History, Algebra, Geometry, Natural Philosophy, Chemistry, Physiology, Zoology, Botany, Latin, Greek, French, German, Political Economy, Drawing,

Painting and Vocal Music. The study of the Classics, Mathematics and Natural Sciences was so thorough that a student graduating from the school could enter the Junior class in any college. The male studerts were excused from the courses in French and Painting and the women were not required to study Greek, German, Political Economy, Double Entry Bookkeeping and Declamation. By the close of the nineteenth century the high school was firmly established as a typical American institution.

Reorganization of the High School

Until the early 1900's the high school was a four year institution based on an eight year elementary school. About 1910 the junior high school appeared in some cities and the traditional 8-4 plan was substituted by the 6-3-3 plan or some other combination. The purpose of the junior high school was to provide a gradual transition from instruction by one teacher in primary school to that of a number of teachers in high school. Moreover, the purpose of the junior high school was to assist the young adolescent:

(1) To continue to acquire and maintain fundamental knowledge, attitudes, appreciations, and skills;

(2) To attain the social skills required for living in a democratic society;

(3) To adjust to physical, emotional and social changes and to growth, i.e., to attain maturity;

(4) To establish satisfying relationships with boys and girls of his own age;

(5) To grow in understanding of the self;

(6) To establish new relationships with his family and other adults;

(7) To plan and prepare for a career;

(8) To form a personal set of standards and values.[19]

Typically, the junior high school cares for the educational needs of the twelve, thirteen, and fourteen year old children. At this level pupils are exposed for the first time to possibilities of choice and the opportunities for specialization. They are provided with a wide range of direct exploratory experience, and they can select an elective from such areas as General Science, General Shop, Printing, Crafts, Art, Electricity, Music, Dramatics or a foreign language. This enables the pupil to discover his area of interest. Grades are not usually given in the elective fields, and, if given, they are not considered as marks of achievement. Reading, General Science, Mathematics, General Language and Social Studies are all taught in the spirit of exploration. The multiplicity of choice makes it difficult for the child to adjust to the change from grade school to junior high school. It emphasizes the need for proper guidance and it is hoped that through guidance it will be possible to meet the problems posed by the children of the "in between" ages.

The Senior High School

The senior high school embraces grades ten, eleven, and twelve, although some high schools include grade nine, as well.

Thus, it has to meet the needs of students between ages fourteen and eighteen

The committee on secondary school studies (Committee of Ten) of the National Education Association, appointed in 1892, had grouped the subjects in nine major areas: Latin, Greek, English, other modern Languages, Mathematics, Physics, Astronomy and Chemistry, Natural History (Biology including Botany, Zoology and Physiology), History (Civil Government and Political Economy), and Geography (Physical Geography, Geology and Meteorology). Greater attendance in high schools which provided such a curriculum meant better opportunity for individuals in a society which was becoming more and more industrialized. Naturally, enrollment in high schools increased tremendously. Simultaneously, commercial, technical and industrial schools grew in large cities. In view of these developments, in 1918 the National Education Association appointed the Commission on Reorganization of Secondary Education to define again the objectives of secondary education. The commission listed seven major objectives, manely, (1) worthy home-membership (2) vocation (3) civic education (4) Worthy use of leisure (5) health (6) command of fundamental processes (7) moral character. However, during the 1920's and 1930's the high school curriculum continued to be dominated by college entrance requirements, which made the high schools restive. This resulted in an eight-year course in the 1930's, during which approved high schools were permitted to send their graduates to college regardless of their patterns of studies,

provided the schools claimed that their students were qualified for college work.

The most dramatic challenge to the seven objectives, stated above, came in the middle and late 1940's in the form of "life adjustment education." At the instance of the supporters of this new idea, the U. S. Office of Education arranged a series of regional conferences throughout the country ending in nothing but a renewed emphasis on the Seven Cardinal Principles stated earlier in 1918. Consequently, by the middle of the 1950's the term "life adjustment education" had disappeared.

The Program of Studies in Modern High Schools

The traditional academic subjects still form the nucleus of most secondary school curricula. However, during the last fifty years many subjects have been added to the traditional base.

Practical Arts

Initially the subject of manual arts was introduced into the high school. However, in the last two decades it has developed into fully organized and independent trade schools, especially in major industrial cities. At the senior high school level the courses in practical arts are planned for specific industrial training. Vocational education is no longer regarded as something apart from general education, and beginning courses in practical arts serve more as general education.

Home Economics

In the field of practical arts for girls, cooking and sewing were introduced in the beginning. Now the broad subject of home economics has developed, comprised of foods, clothing, dressmaking, designs, interior decoration, millinery, home management, home hygiene and nursing, child care, home finance, textiles, dyeing and dry cleaning, tailoring, dietetics, bacteriology, household physics and household chemistry. Home Economics now has become a strong area of basic junior high and high school education.

Business and Commerce

Courses such as stenography and bookkeeping are offered in the later years of senior high school, while a business orientation course developed for the ninth grade serves for exploratory purposes.

Fine Arts

As far as music is concerned, school bands and orchestras are emphasized in junior high school and extend throughout senior high school. Courses in music appreciation, harmony and the theory and history of music have not made as much progress.

A four year curriculum in free-hand drawing is offered by many schools and includes the subjects of design, modeling, leatherwork, block printing, landscape design, costume design, pottery and jewelry making. Many of these subjects are also offered as special courses in a large number of schools.

Physical Education and Health

The two world wars have been responsible for the realization of the need for physical fitness. Some time is allowed for health instruction in general science and biology courses, and attempts have also been made to correlate it with home economics. A number of schools have added a separate required health course. It is evident, too that athletic sports are gradually being incorporated as an integral part of the physical education program. Another significant trend in this field is the increasing recognition of mental health of pupils.

Social Studies

Originally social studies were confined to a few courses in various periods of history. Recently it has come to include Social Civics, Vocational Civics, Economics, Sociology, Psychology, Commercial and Human Geography, Problems of Democracy, Personal and Social Problems and Human Living. Thus, social studies serve as a means of development and control of citizens.

Character Education

A number of definite courses of character materials are offered through home-room instruction periods. Some schools use the case-conference method. The most recent emphasis is on units in moral and spiritual values.

Work Experience

During the depression years it became difficult for youth to find work because they lacked occupational experience.

Employers expected more educational attainment, and union labor increased the requirements for apprenticeship. Consequently, attempts were made to provide real work experience for youth in the form of Civilian Conservation Corps, National Youth Administration, and Work Progress Administration. These were co-operative plans which required a certain number of hours at school plus a similar number on a definite job.

Consumer Education

Under this category courses in school banking are included. They are effective in teaching students to use money intelligently, and to get them into the habit of saving. Moreover, the commercial, social studies, science and home-economics departments have all given some emphasis on consumer problems. In some schools, courses in consumer education are offered.

Conservation Education

Some schools offer separate courses on conservation of resources, others attempt to correlate conservation instruction with other courses. In almost every school some school activity deals with conservation.

Safety Education

In some schools, separate courses on safety education have been started. In others, safety is taught as a part of health and the physical education courses. A large number of schools now offer driver training. The complete program is expected to include Swimming and Water Safety, Fire Prevention,

Home Accidents, the School Shops, Athletics, and Recreation.

Distributive Education

Co-operative marketing, which is related to distributive education, is included in the curricula of a number of secondary schools.[20]

Requirements for High School Graduation

High school education takes four years in the 8-4 organization. Even in the 6-3-3 system counting of units according to the Carnegie unit system does not begin until Grade 9. Students usually take four solid or major units at a time for so many clock hours a week, the total representing an academic year's work. Four units each year for four years yield 16 units, the standard formula. Students do take additional fractional units in physical education, and, sometimes, in band, orchestra, or chorus. However, some schools count a quarter unit of physical education every year toward graduation. A few students with high grade-point averages may take more than four units in some years and finish with more than 16 units for graduation. For example, 20 units are required for graduation in Florida and 19 in California and Oregon.

Units toward graduation are ordinarily granted only in the class-room studies. Extra-curricular activities, work experience and community service projects have been regarded as supplementary. However, in some schools, students of low ability are allowed credit for work-experience and other school community activities.

The required units are made up of constants and variables. During the nineteenth century a number of tracks were evolved as variables and a student could choose one of them. Among the constants were included: One year of History; one year of Laboratory Science; two years of English, one year each of Algebra and Geometry; and four years of Foreign Language. In recent years the foreign language requirement has been dropped, but the English requirement has been increased from two to three years. The Algebra and Geometry requirement has been reduced in many schools to one year of Mathematics. This is offset by an increase in Social Studies from one year to two. Generally the 8 required units comprise: English 3; Social Studies 2; Mathematics 1; Science 1; Health 1. On a national basis the Conant Report recommends as constants: four years of English, three or four years of Social Studies including two years of History, one year of Mathematics and one year of Science--all in the four years or grades 9 through 12.

In respect to the variables, the student in the college-preparatory track, has to take Foreign Languages, Science and Mathematics, while one in the business track is faced with additional requirements in Typewriting, Stenography or Bookkeeping and the like.[21]

The Nonrestricted Curriculum

Many schools have broadened the curriculum by eliminating well-defined tracks. In the four year high schools, there may be a few such general constants as four years of English,

four years of physical education, one or two semesters each of Community Civics and General Science, and a year of the history of the United States. The variables are theoretically open to all students, with some limitations as to the grades in which particular ones may be elected. Under such circumstances, the administration has to offer some counseling and introduce certain limitations. The student may be required to select a major with a minor in a certain allied field, or two majors and one or more minors. Obviously, the function of the teacher adviser is highly important under this arrangement of the curriculum.[22]

Comparison

In the seventeenth century, schools in both of these countries emphasized religious education and classical English or classical Greek and Latin. In the eighteenth century subjects of practical value to the middle classes were introduced into the academy in the United States of America. However, in India most of the time was consumed in controversies regarding aims of secondary education, the medium of instruction and the content of secondary education.

High schools in the United States of America grew rapidly in the nineteenth century and vocational education gradually became more and more important. This phenomenon was paralleled also by rapid growth of the academic high schools in India, mainly due to the patriotic spirit of Indians, whose first objective was social and political awakening. Even as late as 1882, little or no attention was paid to the recommendation of

the Hunter Commission in respect to the introduction of technical courses in secondary schools. It was not until early in the twentieth century that diversification of curriculum was first introduced.

In recent years trends in the development of the secondary school curriculum in the two countries have been similar. Students have been exposed to various vocational courses in a general way in the middle school or junior high school and they specialize in the vocation of their choice in the high school. However, the provision for tryout courses has not yet been possible in the Indian Middle School, probably because of financial limitations. Generally speaking the 6-3-3 plan or some other combination has been adopted in both countries, but it may be noted that in India there is no separate middle school, corresponding to the Junior High School in the United States of America. The middle school is a part of either the primary or the high school.

A unique development in Indian secondary education is the introduction of "Basic" education as conceived by Mahatma Gandhi. In that 75-80 per cent of India's population lives in villages and depends on agriculture and village crafts, "Basic" education may develop into a national educational system. In reality, the principle of learning by doing is also applied in American schools, but in a different form.

The term "unit" is not used ir India as a measure of curriculum studied by a student, but it is common to think of years of learning in different subjects. Obviously the difference is only in terminology not in effect. In India students

have the freedom to choose a "track" which they like, while in the United States of America, although the "track" system prevails in many secondary schools, efforts are being made in some schools to eliminate tracks and to help the student in the selection of subjects through guidance and counseling. The special provisions for students of high and low ability which are found in the curriculum in the United States of America are lacking in the curriculum in India.

Students in Indian Secondary Schools have to devote a relatively larger share of their time to the study of languages on account of the multilingual nature of the country. A student has to study the Regional Language, which is usually the mother-tongue but not always so, and also the National Language, Hindi. Moreover, those who want to go to college or Polytechniques must study an Indian classical language, or English or both. On the other hand, in the U.S.A. a student may not have to take a foreign language or a classical language.

Chapter 5

Footnotes

[13]Bureau of Education, India, Report on Post-War Educational Development in India (Delhi: The Manager of Publications, 1944), p. 19.

[14]Humayun, Kabir, "Indian Education Since Independence," Phi Delta Kappan, 39 (December, 1957) 104-7.

[15]Government of India, The Secondary Education Commission Report 1952-53 (Government of India: Ministry of Education, 1954), pp. 73-91.

[16]Emma Reinhardt, American Education--An Introduction (Rev. Edition. New York: Harper Brothers Publishers, 1960), pp. 302-17.

[17]Leonard V. Koos, The American Secondary Schools (Boston: New York: Chicago: London: Atlanta: Dallas: Columbus: San Francisco: Ginn and Company, 1927, pp. 75-85.

[18]Edward A. Krug, The Secondary School Curriculum (New York: Harper and Brothers, 1960) pp. 12-33.

[19]_____, Our Junior High Schools--What Are They Like? (Philadelphia: Curriculum Office, Philadelphia Public Schools, 1956) p. 2.

[20]J. B. Edmonson, Joseph Roemer, Francis L. Bacon, The Administration of the Modern Secondary School (New York: The Macmillan and Company, 1959), pp. 311-20.

[21]Krug, loc. cit., pp. 168-77.

[22]Edmonson, Roemer, Bacon, loc. cit. pp. 323-25.

Chapter 6

The Secondary Education of Exceptional Children in India and in the United States of America

India

The development of facilities for the education of exceptional children is a comparatively recent event in India. Under this category are included the mentally and physically handicapped children. They may number about 1 per cent of all children between 6 and 14. The problem of educating such children was considered by the Central Advisory Board of Education in 1944, and the following recommendations were made:

(1) Provision for mentally and physically handicapped children should form an essential part of a national system of education and should be administered by the Education Department.

(2) If possible, handicapped children should not be segregated from normal children.

(3) The blind and the deaf need special educational arrangements including trained teachers. Central institutions may be established for training the teachers.

(4) The handicapped children should be trained for remunerative employment.[23]

In view of these recommendations, scholarships are awarded to the blind, deaf and orthopedically handicapped students for higher education or for technical training. The training center for the adult blind at Dehra-Dun offers training in handicrafts

to about 150 blind men. Attached to this center is a sheltered workshop, opened in 1954 for blind workers. An employment office for the blind has been functioning in Madras since 1954. A similar office was opened in Bombay in 1959.

The Central Braille press established at Dehra-Dun in 1950, produces Braille literature in several Indian languages, publishes a Hindi Quarterly Digest and manufactures Braille equipment.

A model school for blind children, established in 1959 at Dehra-Dun, provides kindergarten and primary education. Eventually it will develop into a full-fledged secondary school.

United States of America

The past few years have witnessed a remarkable increase in the recognition of the needs of youth, who have physical or mental handicaps. The movement started with crippled children and had developed at first only on the elementary level.

Speech and hearing difficulties received attention first. Educational departments of state and county have given financial aid and have established the services of experts in this area. Local societies have also pushed for more school recognition. Special provisions such as teachers for the home-bound students and classes in sight and hearing conservation are increasing in number. The latest development is in respect to the mentally and emotionally handicapped.

In some schools, the teacher of speech rotates through

the sections in English once a week for the purpose of speech rehabilitation. In other schools speech is scheduled as an extra subject once or twice a week and students are assigned according to their free periods.

Other services provided by the schools for such special students include special methods of instruction, special equipment, modification of the curriculum or an adjusted school schedule. Sometimes these services are offered through a special school or class; often they are provided for individual students in a regular class. The services available also include reading clinics, sight saving and Braille classes.

In the preparation of exceptional young people for employment, members of the school personnel co-operate with workers from other agencies such as vocational rehabilitation centers and employment services. Preparation for employment begins early in the child's school career and progresses through the study of vocations to school work program, both in school and out of school.

There has been renewed emphasis upon the improvement of educational programs for the gifted during the last few years. New and improved programs are being developed to challenge these students, and in many places superior students are being taught at an accelerated pace. Special progress classes are arranged and gifted junior and seniors are offered certain elective college level courses. Numerous schools provide honors classes in various areas of the school program for such students, and

a lesser number have set up even honor schools as separate organizations.

Comparison

Major differences between the education of special children in India and in the United States of America are:

(1) In India facilities for such students are not provided by individual schools but by the Federal and State Governments, probably because the financial burden would be too much for the schools. On the other hand in America, besides the Government agencies, individual schools also try to make provision for special students.

(2) Whereas gifted young men are treated specially in some American schools, there is no such provision in India.

(3) Considerable effort is made by American schools in the areas of reading, speech and hearing correction and sight saving, while in India very little is done in this direction.

Chapter 6

Footnotes

[23] Bureau of Education, India, *Report on Post-War Educational Development in India* (Delhi: The Manager of Publications, 1944), p. 76.

Chapter 7

Extra-Curricular Activities in the Secondary Schools of India and of the United States of America

India

Extra-curricular activities are an integral part of the activities of a school. They naturally vary within limits from school to school depending upon location of the school, its resources and the interests and aptitudes of the staff and students. The Scout and Guide Movement has taken deep root in India, and the new organization, the Bharat Scouts and Guides, has many branches in all the states. Scouting is looked upon as an effective means for the training of character and qualities necessary for good citizenship.

During the last few years the Government of India has instituted a Junior division of the National Cadet Corps, which is open to pupils of all schools. The officers are drawn largely from the teaching profession. This has the advantage of bringing teachers and pupils into closer contact in the training camps. Through this activity certain physical and other activities of a quasi-military nature are taught to the pupils. Of similar nature are the schemes of the Auxiliary Cadet Corps for grades 8-9 and the National Discipline Scheme open to all secondary classes. The purpose of these activities is to make the youths healthy in mind and body.

In many schools training in First Aid, Home Nursing and Mother-Craft are offered so that the students can be useful in

the home and in the local communities.

Moreover, there are other extra-curricular activities such as hiking, excursions, debates, dramas, gardening, school parliament, student's day, science and literary clubs, magazines, exhibitions, and educational radio programs. All such activities add to the appeal of the school and develop the creative talents and social aptitudes of the children. Through these activities the school can increase the potential of the students for leadership and social service and inculcate discipline among them.

United States of America

In the United States of America also the extra-curricular activities form an extremely important part of the educational program, although in the beginning they were considered as a necessary evil. They now include (1) pupil participation in school Government (2) Home-rooms (3) the school assembly (4) school publications (5) music activities (6) dramatic and speech activities (7) social life and activities (8) physical activities for boys and girls (9) school clubs.

These activities help to develop new friendships, teach how to win and lose in a sportsmanlike manner, furnish worthwhile leisure time pursuits and result in more friendly relations with teachers. They can also be a source of valuable information that would not have been obtained in a regular course.

Comparison

From the above description of the extra-curricular activities in the secondary schools of the two countries, it is apparent that they play a comparable role in school life. The absence of quasi-military training from the American schools is because of compulsory military training later in life. However, in India military service is not compulsory. Consequently, schemes like the National Discipline Scheme, Auxiliary Cadet Corps and Junior division of National Cadet Corps have been introduced in secondary schools with the purpose of cultivating discipline among students.

Chapter 8

Guidance and Counseling in the Secondary Schools of India and of the United States of America

India

The subject of guidance has gained great importance in many countries in recent years as a direct consequence of diversification of secondary school curricula. In India as in other countries the provision of diversified courses of instruction has placed additional responsibility upon the teachers and school administrators--that of giving proper guidance to pupils in their choice of courses and careers.

The first Vocational Guidance Bureau was established in Bombay in 1947 as a private agency. In the same year the Government of Uttar Pradesh established a Bureau of Psychology of Allahabad, providing facilities for vocational and educational guidance. In 1950, the Government of Bombay started a similar Bureau. Two years later the Vocational Guidance Association was organized in Bombay. The Central Government also started its own Bureau of Educational and Vocational Guidance at Delhi in 1954 which also offered financial assistance to State Governments for opening new bureaus or expanding the existing ones. At present, Bihar, Madhypradesh, Rajasthan, Punjab and Gujarat also have similar bureaus. A full program of Educational Counseling and guidance in the multi-purpose school was initiated in 1960.

United States of America

The Guidance program has become more important in America than in other countries because of the introduction of numerous courses in secondary schools. Moreover, the youth of today are subjected to much greater emotional strain in the home and in the community than the youth of a generation ago. Also, parents and teachers have placed undue emphasis on the value of white collar professions, resulting in more young people planning for such careers than can be absorbed in the American economic order.

In 1925, the concept of guidance was extended to include phases other than vocation, i.e., health and recreational, social and moral guidance.

The need for guidance service became more urgent as students possessing lower I.Q.'s started going to high school in increasing numbers, in that such students selected unsuitable subjects and the number of dropouts increased. Juvenile delinquency tends to parallel the dropouts. Guidance of such students into the right courses can do much to reduce this problem and to educate a larger percentage of them for more effective citizenship and a better life.

The increased use of various exploratory courses and the different tests for measuring general intelligence have greatly accelerated the work of educatioral guidance. Try-out courses have been designed for vocational analysis, for assistance in educational selection and for preliminary training of those students who must leave school early.

In the smaller schools the guidance service is run entirely by the teachers and the principals. In the larger schools, however, a whole staff of specialists consisting of a psychologist, a psychiatrist, a physician and a remedial teacher undertake the tasks of guidance and counseling. For this purpose the counselors make use of:

1. records from the pupil's former schools;
2. the appropriate tests given near the time of admission and periodically thereafter;
3. personal data blanks;
4. individual interviews with pupils;
5. periodic physical examinations;
6. periodic ratings by teachers;
7. teachers' comments and observations;
8. conferences with the pupil's teachers;
9. interviews with parents and other family members;
10. anecdotal records;
11. autobiographies;
12. visits to pupil's homes;
13. case studies of pupils;
14. sociometric studies;
15. socio-economic rating devices.

Guidance services as applied to the secondary schools in the United States of America are designed to give systematic aid to the pupils in solving their problems and in making adjustments to various situations. They also assist each pupil in learning

more about himself as an individual and as a member of a society; in making the most of his talents and in correcting or compensating for his inadequacies that interfere with his progress.[24]

Comparison

The need for guidance and counseling services in schools arose in both countries from similar causes. Almost up to the time India became independent, the aim of secondary education was general education and preparing the student either for a white collared job in Government or for higher education in a liberal arts college. By the time India gained her freedom, it had already been realized by educationists that if unemployment of the "educated" was to be checked, introduction of technical subjects in secondary education was essential. When a large number of subjects was offered, students had to choose suitable subjects; for this they needed guidance. Similarly in the United States of America, guidance and counseling were first introduced to guide more students toward technical jobs in that more high school graduates qualified for desk jobs were being produced than the American economy could absorb.

At present guidance and counseling in the United States of America cover health, social and moral aspects also. Such expansion of the area of guidance became necessary and urgent because of the complex nature of modern society in which the institutions of the home and family are gradually losing their

place. This is also applicable to urban societies in India and, therefore, the need exists for extension of guidance to areas like health, social and moral life. A few private schools in the large cities have already started offering such guidance. In general, however, the number of pupils in need of this assistance is so large that even to reach them by a limited guidance program will take a very long time. When they are reached, it is certain that the extension of the guidance program to areas other than curriculum will follow.

Chapter 8

Footnotes

[24]Emma Reinhardt, American Education--An Introduction (New York: Harper Brothers Publishers, 1960), p. 333.

Chapter 9

The Methods of Teaching in the Secondary Schools of India and of the United States of America

India

Education in India dates back to the dim dawn of time. There was a period of Vedic education and a corresponding period of Tamillian education. At that time there were no books, and all instruction was by oral transmission, the teacher reciting and the pupils repeating. However, Vedic education was not mere memory training. It also included character training and training for social life and citizenship. Vedic education was imparted to the student through the opportunities for free discussions, questioning, debating and contemplation. In the centuries after the Christian era, under the great emperors, who were patrons of learning, there were great universities like Nalanda, Vikramshila, in which thousands of students studied. All knowledge was divided into sense and common sense. Sense was inculcated through the worship of the Godhead and through the knowledge of the Vedas, while common sense was sought from the Goddess or Nature. Thus education was inseparably associated with religion.

With the Muslim invaders came the Muslim educational institutions: "Maktab," the primary school attached to a mosque, in which portions of the Koran, reading, writing and simple arithmetic were taught. "Madrasah," on the other hand, was a

school for higher learning. It was also associated with a mosque. Some of them rose to the status of universities. The curriculum included Grammar, Rhetoric, Logic, Theology, Metaphysics, Literature, Jurisprudence and Science. The medium of instruction was Persian but the study of Arabic was compulsory for Muslims.[25]

Along with the above systems, there arose in most parts of India a popular system of elementary education, which was open generally to everyone. It must have been created to supply a popular demand for instruction in reading, writing and arithmetic and served chiefly the trading and agricultural classes.

Thus, when the British introduced Western education in India, in addition to the Hindu "Tols" and Muslim "Madrasahs," which were different types of higher learning, there were found Hindu "Pathshalas" and Muslim "Maktabs." The curriculum included reading, writing, the composition of letters; and elementary arithmetic and accounts, either commercial or agricultural or both. In learning, writing came before reading. Except for the united repetition of multiplication tables and exercises of that kind, the instruction was individual and monitors were commonly chosen from among the more advanced scholars to help those at a more elementary stage of instruction. Dr. Andrew Bell obtained his idea of the monitorial system from what he had seen in the indigenous schools in India. These elementary schools did not have any connection with Sanskrit schools which were meant for the religious and the learned. In the case

of Muslim education, however, there was close connection between the Arabic schools of higher learning or "Madrasahs" and the Persian schools or "Maktabs." In the Persian schools elementary grammatical works, forms of correspondence were taught and popular poems and tales were read. Moreover, sections of the Koran were memorized and the schools had more religious influence than the Hindu vernacular schools. Reading was taught before writing, in contrast to the Hindu vernacular schools.

Although the real pioneers of Western education in India were Christian missionaries, it was only in 1813 that the East India Company took upon itself the responsibility of educating Indians. This was followed by the great controversy between Anglicists and Orientalists. Macaulay's Minute of 1835 decided in favor of Western education. As a result, the medium of instruction in schools and colleges was to be English. English schools became popular because education in them led to remunerative government employment. This trend was further encouraged by a proclamation made in 1844 by the governor, Lord Hardinge, that those who were educated in English schools and who passed an examination held annually should be given preference in appointments to government offices, offices which were almost entirely of a clerical natu .

It was during the two decades following Macaulay's Minute that the secondary schools as we understand them today came into existence. They consisted of two parts, the vernacular middle school and the English high school. Although there was

opposition to this system from orthodox Hindu and Muslim quarters, when the decision to establish universities patterned after the Western institutions was taken in 1854, it became evident that the future was with European learning. Consequently the indigenous schools gradually deteriorated.

The standard of the new high schools was fairly high in languages and literature but low in the practical aspect of science. In the syllabus for senior scholarships in Bengal there is a mention of differential and integral calculus, hydrostatics and optics; though the standard seems high, there is no evidence of depth of individual study. The seeds of bookishness and superficiality in Indian education were thus sown before 1854. The question papers of the time give the same impression as those of today that they are based on books and notes rather than on subjects and things.[26]

The establishment of the Universities of Bombay, Calcutta, and Madras in 1857 had an unfortunate effect on secondary schools. As English was the medium of the lectures in colleges, the importance of English in high schools increased. Again, secondary education became only a preparation for the university.

The universities adhered strictly to the unemployment policies of the Government; they taught English very well but they proved most inefficient in their teaching of other subjects. In the teaching of English, the translation and the direct methods were tried; the latter reported to have yielded better results than the former, in which the scholar is forced to translate word for word instead of being permitted to give a free

translation. The direct method is therefore generally employed at present. A third method called Dr. West's method was tried in Bengal, based on the assimilation of an ever increasing vocabulary.

Teaching in other subjects continued to be stereotyped and dominated by the anticipation of the final examination until the early 1930's. The system of cramming was in vogue, and practice of private tutoring was resorted to by almost everybody. Teachers of science dictated notes to the pupils and very seldom allowed the boys to learn by handling the apparatus and by performing the experiments themselves, in spite of the necessary equipment being available. The average teacher had the notion that the contents of the textbook were the only thing he was responsible to stuff into his pupils' heads.

As school-leaving examination certificates were required either for public service or for admission to college, more and more students who did not have the proper aptitude strove fervently for the certificate. With the prospect of losing fees, the head-master gave promotions to students who did not deserve them. Ultimately the standard of the school-leaving examination tended to fall because a certain reasonable percentage had to pass. Also, because the progress of a school was judged by the percentage of students passing the school-leaving or matriculation examination, the teachers tended to show the students the easy tricks to use to get through the final examination.

A natural consequence of this anxiety to get a high

percentage of successful candidates at the final examination was that no new methods of teaching the different subjects except English were tested.

In order to reduce the emphasis placed upon the public examination, the system of moderating a candidate's marks by taking into account the individual mark in each subject he gained in his last year at school was introduced in Madras in the '20's. However, it had to be abandoned in 1925 because it did not help to eliminate cramming of dictated notes.

In order to prevent laxity in promotion of pupils from class to class an external examination at the end of middle school was introduced in the North-West Frontier Province and Punjab during 1927-1928. In Bihar, Orissa and Assam pupils who attended English middle schools had to pass a public examination before they could be admitted to high schools. These examinations had a very desirable effect in raising the general standard of the upper classes of high schools and in discouraging those boys at the middle stage who were obviously wasting time and energy to continue further study in a high school.[27]

Although average schools were not inclined to undertake any experiments in methods of teaching, some interested schools did try the Dalton Plan in Bengal, in the United Provinces, in Assam and the Punjab. The main features of the Dalton Plan were:

1. Individualized instruction, so that the child may work to capacity, in spite of great individual differences.
2. Freedom with stabilizing responsibility, so that each

child may work at his own speed and according to his own will.

3. A socialized environment, i.e., community living, so that each child may not merely be "an intelligent participator in the life of his immediate group," but also a part of the still greater objective, "to bring the various groups into such constant interaction that no individual, no economic group could presume to live independently of others."[28]

The Dalton Plan attained varying degrees of success in different schools depending on the head-master, his staff and the equipment available.

The American Baptist mission at Bhimpur in Bengal organized in 1925 a "project method of study," which was aimed at supplementing book learning by village industrial arts. This method was introduced also in the United Provinces four years later. At Moga in the Punjab the American Presbyterian mission tried the project method. Here not only was the school work centered around certain projects, but the students also took a large degree of responsibility in the discipline of the school and elected for this purpose their own "Panchayat." Realizing that the Western type of secondary school could not meet the needs of the Indian masses and that it was serving only to produce clerks among the different classes of people, Rabindranath Tagore, the famous Bengali poet, established a school in the present century known as "Visvabharati" which gradually developed

into a complete arts college. The distinctive aim of this institution was that it be developed on an Indian pattern; Indian culture would be taught; Indian customs respected; and a simple life led in common by both teachers and pupils. Classes were to be held in the open; and in accordance with Indian ideals, a personal relationship would exist between teacher and pupil. After the death of Tagore the institution was taken over by the Government of India.

At Cossipore near Calcutta, Rewachand Animanand opened the Boys' Own Home in 1904. In this school the Indian ideal of "Guru," the intimate relationship of teacher and pupil, like that of a father and son, was stressed. The enrollment was limited in order to preserve this relationship, and, as in the Indian schools of ancient times, all the work of the house was done by the pupils along with their teachers. Every subject was taught by the direct method and the older pupils helped to teach the younger ones.

In some places like Dehra-Dun, schools have arisen which are an attempt to reproduce in India schools based on the lines of the English "public schools" like those of Eton and Harrow. The pupils come from the families of the Indian Princes and other wealthy homes. Obviously, they have little value for the education of the Indian people as a whole.[29]

An experiment adapted to Indian conditions and likely to have far-reaching results was formerly known as the Wardha Scheme and now called, "Basic Education." It was initiated in

1937 by the late Mahatma Ghandi. It has many similarities to the Moga Project mentioned above. The essential feature of Basic Education is that it makes productive work the main basis of the educational process. The whole curriculum centers round an important local handicraft, which may vary from place to place. Spinning and weaving have been largely favored as suitable subjects, but other crafts are included in the plan, such as gardening (leading to agriculture), cardboard and paper work (leading to wood and metal work), leather work, clay work (leading to pottery), and homecrafts for girls. The basic handicraft is taught both practically and theoretically and is correlated with other subjects. The scheme aims at a close integration between the school and the community at large. Moreover, in Basic Schools the pupils are encouraged to take a large share in the organization and running of the schools, a valuable training for the pupils to take their part in civic and social life of the community. After India's independence, this scheme has been encouraged by the states and the Central Government, especially in the rural areas.

In the late '30's we find significant improvements in the methods of teaching of some subjects. For example, in Bombay teaching of Mathematics involved a stress on neatness and accuracy, and a practical point of view was taken in the treatment of the subject. Teaching of History was made realistic by the free use of maps, charts, time scales, battle plans, etc. However, pupils were not encouraged to discover facts for themselves, much

less to understand the significance of certain historical events and world affairs. In Delhi, teachers in high schools were required to keep diaries showing a daily record of class work, home assignments, and preparation notes on lessons taught. These notebooks were seen and signed by head-masters every week and were carefully scrutinized by inspecting officers during the school inspection.

At this time the effect of change of medium from English to vernacular was also being felt. Although it led to deterioration in the standard of English, it helped considerably to develop a more intelligent grasp of other subjects in the curriculum and a more practical attitude on the part of the pupils toward the problems of everyday life.[30]

United States of America

In earlier generations, the greater part of the aims and activities were conceived to be the temporary ability to recite from the schoolbook facts, understood partially or not at all, and unrelated to the problems and needs of both the young people or adults; and to acquire some of the more elementary skills in the three R's, and in Latin, Algebra and Geometry. Memorizing was therefore the prevailing mode of learning--little or no consideration was given to concomittant learning or to the present or future use the pupil could make of the knowledge he was acquiring. The acquisition of knowledge was considered to be largely an end in itself. In such a system the role of the

teacher was as described by Comenius:[31]

> "The teacher must stand on an elevated platform, keeping all the scholars in his sight at once, and allowing none of them to do anything but be attentive and look at him. He must imbue them with the notion that the mouth of the teacher is a spring from which streams of knowledge issue forth and flow over them, and that wnenever they see the spring open, they should place their attention like a cistern beneath it, and thus allow nothing that flows forth to escape.

The use of fear, humiliation, and physical punishment persisted as a very important incentive to application, but in gradually diminishing degree, until, by the beginning of the nineteenth century, corporal punishment was used sparingly--only for infraction of authority and discipline. The general outline of instructional procedure consisted of class recitation and assigned work, amounting to little more than oral and written testing. Teaching loads of six or seven classes a day precluded the expenditure of much time upon reading work written by students. Little provision was made for the unique qualities and characteristics of the individual student.

The twentiety century had witnessed a many-sided and withering attack upon the old standard daily recitation, lesson-hearing concept of teaching. The supervised study movement, which began about 1910, has spread in various forms throughout the country. Under the supervised study plan, much less time is given to recitation and much more attention to directing the study efforts of the students. At first this plan involved a double period of minety minutes and the recite-study sequence. It now usually employs a lengthened fifty-five to sixty minute

period, divided in a flexible manner and in various forms of large unit assignments. Group discussions, co-operative studies and work projects have also spread steadily in daily practice. The teacher in the modern school recognizes the necessity of self-activity on the part of the student. The instructor also realizes that teaching materials most closely related to the immediate needs and interests of the students have the best chance of being utilized by these students, confronted by an ever-increasing number of personal, economic and social problems. Recognition is being increasingly given to concomittant learnings. The modern teacher is as much concerned with the development of character, personality, mental hygiene, and social adjustment as with the intellectual goals. He therefore focuses attention upon life situations and plans learning experiences which are designed for better adjustment in various areas of life. He makes a point to learn a great deal about each individual as soon as possible and to make adjustments in the provision of the learning experiences to suit each individual. In view of these general ideas, the current trends in the methods of teaching are as follows:

Problem-solving Instead of Recitation:

Today more teachers are employing the problem-solving situation rather than recitation in a class period. Analysis, reasoning, and discussion are replacing memorization and recitation.

Learning versus Reciting:

The read-recite-test is an impoverished way of teaching. Efficient learning requires genuine interaction between the student and the content of education. The learning process that is not reworked, reshaped, rediscovered by the student never becomes a part of him and soon disappears. The modern teacher, therefore, employs discussion to ensure active participation. Discussion of controversial issues is encouraged, and the teacher makes an effort to distribute participation among as many students as possible.

Drill is confined to separate elements that need to be available as a kind of automatic response, while review is used to reinforce the relationship of separate elements of learning. Learning games are used as one of the drill procedures because they increase participation of students in drill and involve extensive and penetrating enquiry into the subject matter.

Realism versus Verbalism:

Teachers are planning instructional learning and activities which concentrate more upon ideas and upon real things and less upon the reading and repeating of words which have little meaning. Understanding is developed through procedures which are more realistic, such as audiovisual aids of various kinds. In addition to a more widespread use of simple aids such as pictures, maps, slides, natural and manufactured objects illustrating lesson topics, laboratory apparatus, and models, many schools are today employing sound movies and radio programs.

Learning through Action:

Teachers are employing learning situations which involve more action and construction on the part of the youngsters and less dependence upon spoken words. Role-playing is employed to ensure active student participation. It invites students to act out the roles of people in the living world, revealing thereby the values of human relations.

Individual and Group Self-direction:

Students are not only permitted but encouraged to plan their learning activities with the aid of the teacher. Learning with others is an important pathway to better understanding of how to live with others. In group efforts, adolescents may learn not only the subject matter of the curriculum but the skills of working in a social group. Group techniques are, therefore, used in modern high schools to improve both individual learning and group achievement.

Communication Skills:

The teaching of reading, writing, listening and speaking is emphasized by the modern teacher because these communication skills have to be developed in the students to a level adequate for dealing with the demands of work, college and social intercourse.

Guidance and All-round Growth:

Teachers are taking more cognizance of the problems that young people face and are providing both individual and group

guidance of boys and girls in connection with their problems, their frustrations and their attempts to replace dissatisfactions and fears with satisfaction and confidence.

Evaluation and Measurement:

Teachers are developing more effective procedures for evaluating the learning of their students. Evaluation procedures are becoming less a matter of paper and pencil tests of intellectual growth. Teachers are increasingly employing various kinds of daily observations of young people and their behavior so as to evaluate the amount and nature of growth, to recognize interfering influences, and to detect the development of unfortunate types of behavior.[32]

Slow and fast learners present special problems for the modern teacher. In planning his work, gathering materials, selecting content, the teacher keeps in mind the differing needs of the very fast and the very slow students and makes adequate provision for both types. Each subject field presents different problems to be solved for both slow and fast students and provides different opportunities for definite learning experiences.

It is the continuing task of the teacher to appraise the growth of his students' ability and to direct intelligently his own acquisition of knowledge. The teacher is only democratic when he forever sees himself as a guide, not a dictator.[33]

Comparison

The trends in the development of methods of teaching in the secondary schools of the two countries are generally alike. Before the beginning of the present century recitation played an important role in teaching and the usefulness of the knowledge imparted was not a significant consideration in the United States of America. Similarly in India, since the beginning of the nineteenth century, when the Western education was introduced, up to the early 1930's, acquisition of bookish facts by the pupils was the chief aim of secondary education, although some isolated efforts were made to introduce the project method in some schools and to reemphasize the Indian traditional concept of "Guru" by developing personal relationship between the teacher and the taught.

However, since the beginning of the present century in the United States of America and the late thirties in India, significant changes in the methods of teaching have been initiated. In India the use of maps, charts, battle plans, models, handling of apparatus and so on was introduced with a view to enable the student to get a better grasp of the subject matter. In recent years movies and radio have also been used in teaching on a limited basis. Also the idea of basic education was promoted by the late Mahatma Ghandi, laying great emphasis on productive work as the main basis of the educational process and integrating the school with the community. In the United States of America the supervised study movement arose and the emphasis

on recitation was greatly reduced and much more effort went in directing the study effort of the student. Group discussion, cooperative study, work projects were introduced. The use of maps, charts, movies and later radio became prominent. Recently, television has also been employed as an aid in teaching. Wherever there is need for recitation, learning games are used. In planning the subject matter the teacher now makes provision for slow and fast learners. In order to achieve the development of the whole personality of the pupil rather than only his intellect, in recent years, teachers offer guidance in solving even the personal problems of the students.

Chapter 9

Footnotes

[25]F. E. Keay, A History of Education in India and Pakistan (Calcutta: Oxford University Press, 1959), p. 108.

[26]T. N. Siquera, The Education of India, History and Problems (Bombay: Oxford University Press, 1952), p. 51.

[27]Government of India, "Education in India, 1927-28 (Calcutta: Central Publication Branch, 1930), p. 20.

[28]Philadelphia; South Philadelphia High School for Girls, Educating for Responsibility--Dalton Laboratory Plan in a Secondary School. (New York: The Macmillan Company, 1926) pp. 1-2.

[29]Keay, loc. cit., pp. 210-11.

[30]Bureau of Education, India, Education in India in 1935-36 (Delhi: Manager of Publications, 1938), p. 31.

[31]H. H. Mills, H. H. Douglas, Teaching in High School (New York: The Ronald Press Company, 1957), p. 5.

[32]Ibid., p. 11.

[33]J. D. Grambs, W. T. Iverson, F. K. Patterson, Modern Methods in Secondary Education (New York: Henry Holt and Company, 1958), p. 121.

Chapter 10

Summary

A comparison of secondary education in India and the United States of America has been made with reference to (1) History (2) Aim (3) Medium of Instruction (4) Curriculum (5) Education of Exceptional Children (6) Extra-Curricular Activities (7) Guidance and Counseling (8) Methods of Teaching. During the colonial periods in both countries secondary education was directed toward the classes, and the emphasis was on general education involving classical studies. It was only after the achievement of independence from the British that vigorous attempts were made in the United States of America and in India to modify secondary education in such a way that it could meet the practical needs of common people. With the growing complexity of society, diversification of curriculum has increased because of the need to meet the requirements for a large variety of professions. The major differences in the educational systems in the two countries are: (1) the rapid growth of secondary education in respect to diversification of curriculum started in the United States of America at the beginning of the present century while in India it began toward the middle of the century; (2) the industrialization of India may also be said to be about fifty years behind that of America.

Although the aims of secondary education in India and in the United States of America were different earlier, at present

it is directed to meet the changing social, political and economic demands of the people in both of the countries.

Medium of instruction was never a problem in the United States of America, but in multilingual India, almost up to the end of British rule the medium was English. It was only in the late thirties that it was replaced by regional languages.

Generally speaking, the 6-3-3 plan, or some other combination, has been adopted in both countries. However, in India the Junior high school is either merged with the primary or with the high school. Students are exposed to various vocational courses in a general way in the middle school or junior high school, and they specialize in the vocation of their choice in the high school. In India students have the freedom to choose a "track", while in the United States of America in some schools the "track" system is being replaced by a non-restricted curriculum and students are given guidance in the selection of the proper subjects. Due to the multilingual nature of India, students have to spend relatively larger proportion of their time in the study of languages than their American counterparts. A novel system of craft centered education popularly known as "Basic Education" and conceived by Mahatma Ghandi, is being tested on a large scale, especially in rural India.

Facilities for the education of exceptional children in India are very limited as compared to those in the United States of America, and they are entirely provided by Federal or State Governments. There is practically no special provision in India

for the gifted students, whereas in the United States of America accelerated programs are available in some schools for such students. In the American schools considerable effort is made in the areas of reading, speech and hearing correction and sight saving, while in India little is done in this direction.

In India quasi-military schemes like National Discipline Scheme, Auxiliary Cadet Corps, and Junior Division of National Cadet Corps form a significant part of the extra-curricular activities, in contrast to the complete absence of such activities in the American schools. The nature and the role of other extra-curricular activities are comparable in the two countries.

In the area of guidance and counseling, the state and federal vocational guidance bureaus have been established in India in the last decade, but in individual schools, as no specialista are available, teachers and principals do whatever they can. On the other hand in America special guidance and counseling staff generally cover, not only the courses, but also health, social and moral aspects of a student's life.

There is a great similarity in the development of methods of teaching in India and in the United States of America. The early emphasis on recitation has been replaced in both the countries by promotion of a meaningful grasp of the subject matter by the pupil. The use of maps, charts, models, movies, radio and so on is made as teaching aids. The project method is very widely employed. Development of the intellect is no more the sole purpose of secondary education but the proper growth of the entire personality is aimed at.

Bibliography

1. Bureau of Education, India. Education in India, 1938-39. Delhi: The Manager of publications, 1939.

2. Bureau of Education, India. Report on Post-war Educational Development in India. Delhi: The Manager of publications, 1944.

3. Bureau of Education, India. Education in India, 1935-36. Delhi: The Manager of publications, 1938.

4. Butler, Nicholas Murray. Monograph of Education in the U.S.A. Albany: J. B. LyonCo., 1900.

5. Edmonson, J. B., Roemer, Joseph, Bacon, Francis L. The Administration of the Modern Secondary School. New York: The Macmillan Company, 1959.

6. Ghandi, M. K. Basic Education. Ahmedabad: Navjivan Publishing House, 1956.

7. Government of India. The Secondary Education Commission Report 1952-53. Govt. of India, Ministry of Education, 1954.

8. Government of India. Education in India, 1927-28. Calcutta: Central Publication Branch, 1930.

9. Grambs, J. D., Iverson, W. T., Patterson, F. K. Modern Methods in Secondary Education. New York: Henry Holt and Co., Inc. 1958.

10. Kabir, Humayun. Education in New India. New York: Harper Brothers, 1957.

11. Kabir, Humayun. "Indian Education Since Independence." Phi Delta Kappan, 39 (December, 1957), 104-7.

12. Keay, F. E. A History of Education in India and Pakistan. Calcutta: Oxford University Press, 1959.

13. Koos, Leonard V. The American Secondary Schools. Boston: New York: Chicago: London: Atlanta: Dallas: Columbus: San Francisco: Ginn and Company, 1927.

14. Krug, Edward A. The Secondary School Curriculum. New York: Harper and Brothers, 1960.

15. Mills, H. H., Douglas H. R. Teaching in High School. New York: The Ronald Press Company, 1957.

16. Ministry of Education, Government of India. Progress of Education in India, 1947-52. Quinquenniel Review. Delhi: The Manager of publications, 1953.

17. Ministry of Information and Broadcasting, Government of India. India 1960. New Delhi: The Publications Division, Ministry of Information and Broadcasting, Government of India, 1960.

18. Nurullah, Syed, Naik, J. P. A History of Education in India. Bombay: Calcutta: Madras: London: Macmillan & Co., Ltd., 1951.

19. Philadelphia, South Philadelphia High School for Girls. Educating for Responsibility. Dalton Laboratory plan for secondary school. New York: The Macmillan Co., 1926.

20. Reinhardt, Emma. American Education--An Introduction. Revised Edition. New York: Harper Brothers Publishers, 1960.

21. Biqueira, T. N. The Education of India, History and Problems. Bombay: Oxford University Press, 1952.

22. UNESCO. World Survey of Education. Vol. III. Secondary Education. New York: Paris: International Documents Service. A Division of Columbia University Press, 1961.

23. _____ Our Junior High Schools--What Are They Like? Curricula Office, Philadelphia Public Schools, 1956.